

US EPA ARCHIVE DOCUMENT

10/23/2009

Mr. Doug Lam
Trihydro Corporation
5000 State Route 128

Cleves OH 45002

Project Name: Hooven VI 2008-2009

Project #: 500-016-012
Workorder #: 0910192

Dear Mr. Doug Lam

The following report includes the data for the above referenced project for sample(s) received on 10/7/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Bryanna Langley
Project Manager

WORK ORDER #: 0910192

Work Order Summary

CLIENT:	Mr. Doug Lam Trihydro Corporation 5000 State Route 128 Cleves, OH 45002	BILL TO:	Mr. Paul Michalski Trihydro Corporation 5000 State Route 128 Cleves, OH 45002
PHONE:	513-353-1323 ext 23	P.O. #	08-050WO-L
FAX:	513-353-4664	PROJECT #	500-016-012 Hooven VI 2008-2009
DATE RECEIVED:	10/07/2009	CONTACT:	Bryanna Langley
DATE COMPLETED:	10/23/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	Float 1 - 092909	Modified TO-15	6.0 "Hg	5 psi
02A	Float 1 - 093009	Modified TO-15	8.0 "Hg	5 psi
03A	Float 1 - 100109	Modified TO-15	4.0 "Hg	5 psi
04A	Float 1 - 100209	Modified TO-15	10.5 "Hg	5 psi
05A	BD 1 - 100209	Modified TO-15	9.5 "Hg	5 psi
06A	TB-2, 100209	Modified TO-15	29.0 "Hg	5 psi
07A	Lab Blank	Modified TO-15	NA	NA
08A	CCV	Modified TO-15	NA	NA
09A	LCS	Modified TO-15	NA	NA

CERTIFIED BY:



DATE: 10/23/09

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
 NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
 Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/10

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE
Modified TO-15
Trihydro Corporation
Workorder# 0910192**

Six 6 Liter Summa Canister (100% Certified) samples were received on October 07, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	TO-15	ATL Modifications
ICAL %RSD acceptance criteria	+ 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+ 30% Difference	</= 30% Difference with four allowed out up to </=40%; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

The trip blank, sample TB-2, 100209, has reportable levels of target compounds present.

The reported result for Methylene chloride in sample Float 1 - 100109 may be biased high due to co-elution with a non target compound with similar characteristic ions.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Float 1 - 092909

Lab ID#: 0910192-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.83	2.2
Chloromethane	0.17	0.46	0.35	0.95
Freon 11	0.17	0.24	0.94	1.3
Ethanol	0.84	3.0	1.6	5.7
Acetone	0.84	25	2.0	58
2-Propanol	0.84	1.5	2.1	3.6
2-Butanone (Methyl Ethyl Ketone)	0.17	3.9	0.50	11
Benzene	0.17	0.27	0.54	0.88
Toluene	0.17	0.25	0.63	0.95

Client Sample ID: Float 1 - 093009

Lab ID#: 0910192-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.41	0.90	2.0
Chloromethane	0.18	2.4	0.38	4.8
Chloroethane	0.18	0.44	0.48	1.2
Freon 11	0.18	0.22	1.0	1.2
Ethanol	0.92	9.5	1.7	18
Acetone	0.92	27	2.2	64
2-Propanol	0.92	1.6	2.2	3.8
Carbon Disulfide	0.92	25	2.8	79
2-Butanone (Methyl Ethyl Ketone)	0.18	15	0.54	44
Benzene	0.18	0.59	0.58	1.9
Heptane	0.18	0.19	0.75	0.78
4-Methyl-2-pentanone	0.18	0.71	0.75	2.9
Toluene	0.18	1.1	0.69	4.3
Tetrachloroethylene	0.18	0.21	1.2	1.4
Ethyl Benzene	0.18	0.49	0.79	2.1
m,p-Xylene	0.18	1.1	0.79	4.8
o-Xylene	0.18	0.52	0.79	2.2
Styrene	0.18	0.19	0.78	0.81
4-Ethyltoluene	0.18	0.52	0.90	2.6
1,3,5-Trimethylbenzene	0.18	0.19	0.90	0.95
1,2,4-Trimethylbenzene	0.18	0.72	0.90	3.6
1,4-Dichlorobenzene	0.18	0.20	1.1	1.2
Naphthalene	0.92	0.91 J	4.8	4.8 J



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Float 1 - 093009

Lab ID#: 0910192-02A

Client Sample ID: Float 1 - 100109

Lab ID#: 0910192-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.36	0.96	1.8
Chloromethane	0.19	0.48	0.40	1.0
Freon 11	0.19	0.22	1.1	1.2
Ethanol	0.97	2.1	1.8	4.0
Acetone	0.97	9.9	2.3	24
2-Propanol	0.97	69	2.4	170
Methylene Chloride	0.39	0.91	1.3	3.2
Hexane	0.19	0.94	0.68	3.3
2-Butanone (Methyl Ethyl Ketone)	0.19	0.89	0.57	2.6
Cyclohexane	0.19	2.0	0.67	6.8
Benzene	0.19	0.42	0.62	1.4
Heptane	0.19	0.34	0.80	1.4
Toluene	0.19	0.72	0.73	2.7
m,p-Xylene	0.19	0.26	0.84	1.1
Isopentane	0.97	68	2.9	200
Butane	0.97	13	2.3	30
Methylcyclohexane	0.97	2.8	3.9	11

Client Sample ID: Float 1 - 100209

Lab ID#: 0910192-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.21	0.44	1.0	2.2
Chloromethane	0.21	0.80	0.42	1.6
Bromomethane	0.21	0.48	0.80	1.9
Freon 11	0.21	0.35	1.2	1.9
Ethanol	1.0	22	1.9	42
Acetone	1.0	20	2.4	47
2-Propanol	1.0	1.0	2.5	2.5
Carbon Disulfide	1.0	3.7	3.2	12
2-Butanone (Methyl Ethyl Ketone)	0.21	3.7	0.61	11
1,4-Dioxane	0.21	0.22	0.74	0.79
Toluene	0.21	0.27	0.78	1.0



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: BD 1 - 100209

Lab ID#: 0910192-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.20	0.46	0.97	2.2
Chloromethane	0.20	0.70	0.40	1.4
Freon 11	0.20	0.35	1.1	2.0
Ethanol	0.98	3.0	1.8	5.6
Acetone	0.98	17	2.3	41
2-Butanone (Methyl Ethyl Ketone)	0.20	1.0	0.58	3.0
Benzene	0.20	0.32	0.63	1.0
Toluene	0.20	0.31	0.74	1.2

Client Sample ID: TB-2, 100209

Lab ID#: 0910192-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	0.50	0.66	0.94	1.2
Acetone	0.50	4.0	1.2	9.5
2-Butanone (Methyl Ethyl Ketone)	0.10	0.29	0.29	0.85
m,p-Xylene	0.10	0.28	0.43	1.2
o-Xylene	0.10	0.25	0.43	1.1
Propylbenzene	0.10	0.31	0.49	1.5
4-Ethyltoluene	0.10	3.0	0.49	15
1,3,5-Trimethylbenzene	0.10	1.3	0.49	6.4
1,2,4-Trimethylbenzene	0.10	4.8	0.49	23
Butylbenzene	0.50	0.58	2.7	3.2



Client Sample ID: Float 1 - 092909

Lab ID#: 0910192-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101107	Date of Collection:	9/29/09 9:45:00 AM	
Dil. Factor:	1.68	Date of Analysis:	10/11/09 03:31 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.83	2.2
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.17	0.46	0.35	0.95
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
1,3-Butadiene	0.17	Not Detected	0.37	Not Detected
Bromomethane	0.17	Not Detected	0.65	Not Detected
Chloroethane	0.17	Not Detected	0.44	Not Detected
Freon 11	0.17	0.24	0.94	1.3
Ethanol	0.84	3.0	1.6	5.7
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Acetone	0.84	25	2.0	58
2-Propanol	0.84	1.5	2.1	3.6
Carbon Disulfide	0.84	Not Detected	2.6	Not Detected
Methylene Chloride	0.34	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Hexane	0.17	Not Detected	0.59	Not Detected
1,1-Dichloroethane	0.17	Not Detected	0.68	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.17	3.9	0.50	11
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.17	Not Detected	0.82	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.92	Not Detected
Cyclohexane	0.17	Not Detected	0.58	Not Detected
Carbon Tetrachloride	0.17	Not Detected	1.0	Not Detected
Benzene	0.17	0.27	0.54	0.88
1,2-Dichloroethane	0.17	Not Detected	0.68	Not Detected
Heptane	0.17	Not Detected	0.69	Not Detected
Trichloroethene	0.17	Not Detected	0.90	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.78	Not Detected
1,4-Dioxane	0.17	Not Detected	0.60	Not Detected
Bromodichloromethane	0.17	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.69	Not Detected
Toluene	0.17	0.25	0.63	0.95
trans-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.92	Not Detected
Tetrachloroethene	0.17	Not Detected	1.1	Not Detected



Client Sample ID: Float 1 - 092909

Lab ID#: 0910192-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101107	Date of Collection:	9/29/09 9:45:00 AM	
Dil. Factor:	1.68	Date of Analysis:	10/11/09 03:31 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	0.84	Not Detected	3.4	Not Detected
Dibromochloromethane	0.17	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.77	Not Detected
Ethyl Benzene	0.17	Not Detected	0.73	Not Detected
m,p-Xylene	0.17	Not Detected	0.73	Not Detected
o-Xylene	0.17	Not Detected	0.73	Not Detected
Styrene	0.17	Not Detected	0.72	Not Detected
Bromoform	0.17	Not Detected	1.7	Not Detected
Cumene	0.17	Not Detected	0.82	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.82	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.82	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.82	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.82	Not Detected
1,3-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,4-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
alpha-Chlorotoluene	0.17	Not Detected	0.87	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.84	Not Detected	6.2	Not Detected
Hexachlorobutadiene	0.84	Not Detected	9.0	Not Detected
Naphthalene	0.84	Not Detected	4.4	Not Detected
Butylbenzene	0.84	Not Detected	4.6	Not Detected
sec-Butylbenzene	0.84	Not Detected	4.6	Not Detected
Isopentane	0.84	Not Detected	2.5	Not Detected
Butane	0.84	Not Detected	2.0	Not Detected
Methylcyclohexane	0.84	Not Detected	3.4	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: Float 1 - 093009

Lab ID#: 0910192-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101108	Date of Collection: 9/30/09 9:35:00 AM		
Dil. Factor:	1.83	Date of Analysis: 10/11/09 04:07 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.41	0.90	2.0
Freon 114	0.18	Not Detected	1.3	Not Detected
Chloromethane	0.18	2.4	0.38	4.8
Vinyl Chloride	0.18	Not Detected	0.47	Not Detected
1,3-Butadiene	0.18	Not Detected	0.40	Not Detected
Bromomethane	0.18	Not Detected	0.71	Not Detected
Chloroethane	0.18	0.44	0.48	1.2
Freon 11	0.18	0.22	1.0	1.2
Ethanol	0.92	9.5	1.7	18
Freon 113	0.18	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.72	Not Detected
Acetone	0.92	27	2.2	64
2-Propanol	0.92	1.6	2.2	3.8
Carbon Disulfide	0.92	25	2.8	79
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.66	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
Hexane	0.18	Not Detected	0.64	Not Detected
1,1-Dichloroethane	0.18	Not Detected	0.74	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.18	15	0.54	44
cis-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected
Chloroform	0.18	Not Detected	0.89	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected	1.0	Not Detected
Cyclohexane	0.18	Not Detected	0.63	Not Detected
Carbon Tetrachloride	0.18	Not Detected	1.2	Not Detected
Benzene	0.18	0.59	0.58	1.9
1,2-Dichloroethane	0.18	Not Detected	0.74	Not Detected
Heptane	0.18	0.19	0.75	0.78
Trichloroethene	0.18	Not Detected	0.98	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.84	Not Detected
1,4-Dioxane	0.18	Not Detected	0.66	Not Detected
Bromodichloromethane	0.18	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.18	Not Detected	0.83	Not Detected
4-Methyl-2-pentanone	0.18	0.71	0.75	2.9
Toluene	0.18	1.1	0.69	4.3
trans-1,3-Dichloropropene	0.18	Not Detected	0.83	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	1.0	Not Detected
Tetrachloroethene	0.18	0.21	1.2	1.4



Client Sample ID: Float 1 - 093009

Lab ID#: 0910192-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101108	Date of Collection:	9/30/09 9:35:00 AM	
Dil. Factor:	1.83	Date of Analysis:	10/11/09 04:07 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	0.92	Not Detected	3.7	Not Detected
Dibromochloromethane	0.18	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.18	Not Detected	1.4	Not Detected
Chlorobenzene	0.18	Not Detected	0.84	Not Detected
Ethyl Benzene	0.18	0.49	0.79	2.1
m,p-Xylene	0.18	1.1	0.79	4.8
o-Xylene	0.18	0.52	0.79	2.2
Styrene	0.18	0.19	0.78	0.81
Bromoform	0.18	Not Detected	1.9	Not Detected
Cumene	0.18	Not Detected	0.90	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.2	Not Detected
Propylbenzene	0.18	Not Detected	0.90	Not Detected
4-Ethyltoluene	0.18	0.52	0.90	2.6
1,3,5-Trimethylbenzene	0.18	0.19	0.90	0.95
1,2,4-Trimethylbenzene	0.18	0.72	0.90	3.6
1,3-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.18	0.20	1.1	1.2
alpha-Chlorotoluene	0.18	Not Detected	0.95	Not Detected
1,2-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.92	Not Detected	6.8	Not Detected
Hexachlorobutadiene	0.92	Not Detected	9.8	Not Detected
Naphthalene	0.92	0.91 J	4.8	4.8 J
Butylbenzene	0.92	Not Detected	5.0	Not Detected
sec-Butylbenzene	0.92	Not Detected	5.0	Not Detected
Isopentane	0.92	Not Detected	2.7	Not Detected
Butane	0.92	Not Detected	2.2	Not Detected
Methylcyclohexane	0.92	Not Detected	3.7	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	101	70-130



Client Sample ID: Float 1 - 100109

Lab ID#: 0910192-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101111	Date of Collection: 10/1/09 9:00:00 AM		
Dil. Factor:	1.94	Date of Analysis: 10/11/09 06:47 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.36	0.96	1.8
Freon 114	0.19	Not Detected	1.4	Not Detected
Chloromethane	0.19	0.48	0.40	1.0
Vinyl Chloride	0.19	Not Detected	0.50	Not Detected
1,3-Butadiene	0.19	Not Detected	0.43	Not Detected
Bromomethane	0.19	Not Detected	0.75	Not Detected
Chloroethane	0.19	Not Detected	0.51	Not Detected
Freon 11	0.19	0.22	1.1	1.2
Ethanol	0.97	2.1	1.8	4.0
Freon 113	0.19	Not Detected	1.5	Not Detected
1,1-Dichloroethene	0.19	Not Detected	0.77	Not Detected
Acetone	0.97	9.9	2.3	24
2-Propanol	0.97	69	2.4	170
Carbon Disulfide	0.97	Not Detected	3.0	Not Detected
Methylene Chloride	0.39	0.91	1.3	3.2
Methyl tert-butyl ether	0.19	Not Detected	0.70	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.77	Not Detected
Hexane	0.19	0.94	0.68	3.3
1,1-Dichloroethane	0.19	Not Detected	0.78	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.19	0.89	0.57	2.6
cis-1,2-Dichloroethene	0.19	Not Detected	0.77	Not Detected
Tetrahydrofuran	0.97	Not Detected	2.9	Not Detected
Chloroform	0.19	Not Detected	0.95	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Cyclohexane	0.19	2.0	0.67	6.8
Carbon Tetrachloride	0.19	Not Detected	1.2	Not Detected
Benzene	0.19	0.42	0.62	1.4
1,2-Dichloroethane	0.19	Not Detected	0.78	Not Detected
Heptane	0.19	0.34	0.80	1.4
Trichloroethene	0.19	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.19	Not Detected	0.90	Not Detected
1,4-Dioxane	0.19	Not Detected	0.70	Not Detected
Bromodichloromethane	0.19	Not Detected	1.3	Not Detected
cis-1,3-Dichloropropene	0.19	Not Detected	0.88	Not Detected
4-Methyl-2-pentanone	0.19	Not Detected	0.79	Not Detected
Toluene	0.19	0.72	0.73	2.7
trans-1,3-Dichloropropene	0.19	Not Detected	0.88	Not Detected
1,1,2-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Tetrachloroethene	0.19	Not Detected	1.3	Not Detected



Client Sample ID: Float 1 - 100109

Lab ID#: 0910192-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101111	Date of Collection:	10/1/09 9:00:00 AM	
Dil. Factor:	1.94	Date of Analysis:	10/11/09 06:47 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	0.97	Not Detected	4.0	Not Detected
Dibromochloromethane	0.19	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.19	Not Detected	1.5	Not Detected
Chlorobenzene	0.19	Not Detected	0.89	Not Detected
Ethyl Benzene	0.19	Not Detected	0.84	Not Detected
m,p-Xylene	0.19	0.26	0.84	1.1
o-Xylene	0.19	Not Detected	0.84	Not Detected
Styrene	0.19	Not Detected	0.83	Not Detected
Bromoform	0.19	Not Detected	2.0	Not Detected
Cumene	0.19	Not Detected	0.95	Not Detected
1,1,2,2-Tetrachloroethane	0.19	Not Detected	1.3	Not Detected
Propylbenzene	0.19	Not Detected	0.95	Not Detected
4-Ethyltoluene	0.19	Not Detected	0.95	Not Detected
1,3,5-Trimethylbenzene	0.19	Not Detected	0.95	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.95	Not Detected
1,3-Dichlorobenzene	0.19	Not Detected	1.2	Not Detected
1,4-Dichlorobenzene	0.19	Not Detected	1.2	Not Detected
alpha-Chlorotoluene	0.19	Not Detected	1.0	Not Detected
1,2-Dichlorobenzene	0.19	Not Detected	1.2	Not Detected
1,2,4-Trichlorobenzene	0.97	Not Detected	7.2	Not Detected
Hexachlorobutadiene	0.97	Not Detected	10	Not Detected
Naphthalene	0.97	Not Detected	5.1	Not Detected
Butylbenzene	0.97	Not Detected	5.3	Not Detected
sec-Butylbenzene	0.97	Not Detected	5.3	Not Detected
Isopentane	0.97	68	2.9	200
Butane	0.97	13	2.3	30
Methylcyclohexane	0.97	2.8	3.9	11

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: Float 1 - 100209

Lab ID#: 0910192-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101112	Date of Collection: 10/2/09 9:45:00 AM		
Dil. Factor:	2.06	Date of Analysis: 10/11/09 07:24 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.21	0.44	1.0	2.2
Freon 114	0.21	Not Detected	1.4	Not Detected
Chloromethane	0.21	0.80	0.42	1.6
Vinyl Chloride	0.21	Not Detected	0.53	Not Detected
1,3-Butadiene	0.21	Not Detected	0.46	Not Detected
Bromomethane	0.21	0.48	0.80	1.9
Chloroethane	0.21	Not Detected	0.54	Not Detected
Freon 11	0.21	0.35	1.2	1.9
Ethanol	1.0	22	1.9	42
Freon 113	0.21	Not Detected	1.6	Not Detected
1,1-Dichloroethene	0.21	Not Detected	0.82	Not Detected
Acetone	1.0	20	2.4	47
2-Propanol	1.0	1.0	2.5	2.5
Carbon Disulfide	1.0	3.7	3.2	12
Methylene Chloride	0.41	Not Detected	1.4	Not Detected
Methyl tert-butyl ether	0.21	Not Detected	0.74	Not Detected
trans-1,2-Dichloroethene	0.21	Not Detected	0.82	Not Detected
Hexane	0.21	Not Detected	0.73	Not Detected
1,1-Dichloroethane	0.21	Not Detected	0.83	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.21	3.7	0.61	11
cis-1,2-Dichloroethene	0.21	Not Detected	0.82	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	0.21	Not Detected	1.0	Not Detected
1,1,1-Trichloroethane	0.21	Not Detected	1.1	Not Detected
Cyclohexane	0.21	Not Detected	0.71	Not Detected
Carbon Tetrachloride	0.21	Not Detected	1.3	Not Detected
Benzene	0.21	Not Detected	0.66	Not Detected
1,2-Dichloroethane	0.21	Not Detected	0.83	Not Detected
Heptane	0.21	Not Detected	0.84	Not Detected
Trichloroethene	0.21	Not Detected	1.1	Not Detected
1,2-Dichloropropane	0.21	Not Detected	0.95	Not Detected
1,4-Dioxane	0.21	0.22	0.74	0.79
Bromodichloromethane	0.21	Not Detected	1.4	Not Detected
cis-1,3-Dichloropropene	0.21	Not Detected	0.93	Not Detected
4-Methyl-2-pentanone	0.21	Not Detected	0.84	Not Detected
Toluene	0.21	0.27	0.78	1.0
trans-1,3-Dichloropropene	0.21	Not Detected	0.93	Not Detected
1,1,2-Trichloroethane	0.21	Not Detected	1.1	Not Detected
Tetrachloroethene	0.21	Not Detected	1.4	Not Detected



Client Sample ID: Float 1 - 100209

Lab ID#: 0910192-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101112	Date of Collection:	10/2/09 9:45:00 AM	
Dil. Factor:	2.06	Date of Analysis:	10/11/09 07:24 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	1.0	Not Detected	4.2	Not Detected
Dibromochloromethane	0.21	Not Detected	1.8	Not Detected
1,2-Dibromoethane (EDB)	0.21	Not Detected	1.6	Not Detected
Chlorobenzene	0.21	Not Detected	0.95	Not Detected
Ethyl Benzene	0.21	Not Detected	0.89	Not Detected
m,p-Xylene	0.21	Not Detected	0.89	Not Detected
o-Xylene	0.21	Not Detected	0.89	Not Detected
Styrene	0.21	Not Detected	0.88	Not Detected
Bromoform	0.21	Not Detected	2.1	Not Detected
Cumene	0.21	Not Detected	1.0	Not Detected
1,1,2,2-Tetrachloroethane	0.21	Not Detected	1.4	Not Detected
Propylbenzene	0.21	Not Detected	1.0	Not Detected
4-Ethyltoluene	0.21	Not Detected	1.0	Not Detected
1,3,5-Trimethylbenzene	0.21	Not Detected	1.0	Not Detected
1,2,4-Trimethylbenzene	0.21	Not Detected	1.0	Not Detected
1,3-Dichlorobenzene	0.21	Not Detected	1.2	Not Detected
1,4-Dichlorobenzene	0.21	Not Detected	1.2	Not Detected
alpha-Chlorotoluene	0.21	Not Detected	1.1	Not Detected
1,2-Dichlorobenzene	0.21	Not Detected	1.2	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected	7.6	Not Detected
Hexachlorobutadiene	1.0	Not Detected	11	Not Detected
Naphthalene	1.0	Not Detected	5.4	Not Detected
Butylbenzene	1.0	Not Detected	5.6	Not Detected
sec-Butylbenzene	1.0	Not Detected	5.6	Not Detected
Isopentane	1.0	Not Detected	3.0	Not Detected
Butane	1.0	Not Detected	2.4	Not Detected
Methylcyclohexane	1.0	Not Detected	4.1	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130



Client Sample ID: BD 1 - 100209

Lab ID#: 0910192-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101113		Date of Collection:	10/2/09
Dil. Factor:	1.96		Date of Analysis:	10/11/09 08:19 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.20	0.46	0.97	2.2
Freon 114	0.20	Not Detected	1.4	Not Detected
Chloromethane	0.20	0.70	0.40	1.4
Vinyl Chloride	0.20	Not Detected	0.50	Not Detected
1,3-Butadiene	0.20	Not Detected	0.43	Not Detected
Bromomethane	0.20	Not Detected	0.76	Not Detected
Chloroethane	0.20	Not Detected	0.52	Not Detected
Freon 11	0.20	0.35	1.1	2.0
Ethanol	0.98	3.0	1.8	5.6
Freon 113	0.20	Not Detected	1.5	Not Detected
1,1-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Acetone	0.98	17	2.3	41
2-Propanol	0.98	Not Detected	2.4	Not Detected
Carbon Disulfide	0.98	Not Detected	3.0	Not Detected
Methylene Chloride	0.39	Not Detected	1.4	Not Detected
Methyl tert-butyl ether	0.20	Not Detected	0.71	Not Detected
trans-1,2-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Hexane	0.20	Not Detected	0.69	Not Detected
1,1-Dichloroethane	0.20	Not Detected	0.79	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	1.0	0.58	3.0
cis-1,2-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Tetrahydrofuran	0.98	Not Detected	2.9	Not Detected
Chloroform	0.20	Not Detected	0.96	Not Detected
1,1,1-Trichloroethane	0.20	Not Detected	1.1	Not Detected
Cyclohexane	0.20	Not Detected	0.67	Not Detected
Carbon Tetrachloride	0.20	Not Detected	1.2	Not Detected
Benzene	0.20	0.32	0.63	1.0
1,2-Dichloroethane	0.20	Not Detected	0.79	Not Detected
Heptane	0.20	Not Detected	0.80	Not Detected
Trichloroethene	0.20	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.20	Not Detected	0.90	Not Detected
1,4-Dioxane	0.20	Not Detected	0.71	Not Detected
Bromodichloromethane	0.20	Not Detected	1.3	Not Detected
cis-1,3-Dichloropropene	0.20	Not Detected	0.89	Not Detected
4-Methyl-2-pentanone	0.20	Not Detected	0.80	Not Detected
Toluene	0.20	0.31	0.74	1.2
trans-1,3-Dichloropropene	0.20	Not Detected	0.89	Not Detected
1,1,2-Trichloroethane	0.20	Not Detected	1.1	Not Detected
Tetrachloroethene	0.20	Not Detected	1.3	Not Detected



Client Sample ID: BD 1 - 100209

Lab ID#: 0910192-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101113		Date of Collection:	10/2/09
Dil. Factor:	1.96		Date of Analysis:	10/11/09 08:19 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	0.98	Not Detected	4.0	Not Detected
Dibromochloromethane	0.20	Not Detected	1.7	Not Detected
1,2-Dibromoethane (EDB)	0.20	Not Detected	1.5	Not Detected
Chlorobenzene	0.20	Not Detected	0.90	Not Detected
Ethyl Benzene	0.20	Not Detected	0.85	Not Detected
m,p-Xylene	0.20	Not Detected	0.85	Not Detected
o-Xylene	0.20	Not Detected	0.85	Not Detected
Styrene	0.20	Not Detected	0.83	Not Detected
Bromoform	0.20	Not Detected	2.0	Not Detected
Cumene	0.20	Not Detected	0.96	Not Detected
1,1,2,2-Tetrachloroethane	0.20	Not Detected	1.3	Not Detected
Propylbenzene	0.20	Not Detected	0.96	Not Detected
4-Ethyltoluene	0.20	Not Detected	0.96	Not Detected
1,3,5-Trimethylbenzene	0.20	Not Detected	0.96	Not Detected
1,2,4-Trimethylbenzene	0.20	Not Detected	0.96	Not Detected
1,3-Dichlorobenzene	0.20	Not Detected	1.2	Not Detected
1,4-Dichlorobenzene	0.20	Not Detected	1.2	Not Detected
alpha-Chlorotoluene	0.20	Not Detected	1.0	Not Detected
1,2-Dichlorobenzene	0.20	Not Detected	1.2	Not Detected
1,2,4-Trichlorobenzene	0.98	Not Detected	7.3	Not Detected
Hexachlorobutadiene	0.98	Not Detected	10	Not Detected
Naphthalene	0.98	Not Detected	5.1	Not Detected
Butylbenzene	0.98	Not Detected	5.4	Not Detected
sec-Butylbenzene	0.98	Not Detected	5.4	Not Detected
Isopentane	0.98	Not Detected	2.9	Not Detected
Butane	0.98	Not Detected	2.3	Not Detected
Methylcyclohexane	0.98	Not Detected	3.9	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: TB-2, 100209

Lab ID#: 0910192-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101114	Date of Collection: 10/2/09		
Dil. Factor:	1.00	Date of Analysis: 10/11/09 09:08 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.10	Not Detected	0.21	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.10	Not Detected	0.39	Not Detected
Chloroethane	0.10	Not Detected	0.26	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	0.66	0.94	1.2
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	4.0	1.2	9.5
2-Propanol	0.50	Not Detected	1.2	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Hexane	0.10	Not Detected	0.35	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.29	0.29	0.85
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
Carbon Tetrachloride	0.10	Not Detected	0.63	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Heptane	0.10	Not Detected	0.41	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
1,1,2-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected



Client Sample ID: TB-2, 100209

Lab ID#: 0910192-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101114	Date of Collection:	10/2/09	
Dil. Factor:	1.00	Date of Analysis:	10/11/09 09:08 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	0.50	Not Detected	2.0	Not Detected
Dibromochloromethane	0.10	Not Detected	0.85	Not Detected
1,2-Dibromoethane (EDB)	0.10	Not Detected	0.77	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	0.28	0.43	1.2
o-Xylene	0.10	0.25	0.43	1.1
Styrene	0.10	Not Detected	0.42	Not Detected
Bromoform	0.10	Not Detected	1.0	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
1,1,2,2-Tetrachloroethane	0.10	Not Detected	0.69	Not Detected
Propylbenzene	0.10	0.31	0.49	1.5
4-Ethyltoluene	0.10	3.0	0.49	15
1,3,5-Trimethylbenzene	0.10	1.3	0.49	6.4
1,2,4-Trimethylbenzene	0.10	4.8	0.49	23
1,3-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,4-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
alpha-Chlorotoluene	0.10	Not Detected	0.52	Not Detected
1,2-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected	3.7	Not Detected
Hexachlorobutadiene	0.50	Not Detected	5.3	Not Detected
Naphthalene	0.50	Not Detected	2.6	Not Detected
Butylbenzene	0.50	0.58	2.7	3.2
sec-Butylbenzene	0.50	Not Detected	2.7	Not Detected
Isopentane	0.50	Not Detected	1.5	Not Detected
Butane	0.50	Not Detected	1.2	Not Detected
Methylcyclohexane	0.50	Not Detected	2.0	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: Lab Blank

Lab ID#: 0910192-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101106a	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 10/11/09 02:20 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.10	Not Detected	0.21	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.10	Not Detected	0.39	Not Detected
Chloroethane	0.10	Not Detected	0.26	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	Not Detected	1.2	Not Detected
2-Propanol	0.50	Not Detected	1.2	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Hexane	0.10	Not Detected	0.35	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	Not Detected	0.29	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
Carbon Tetrachloride	0.10	Not Detected	0.63	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Heptane	0.10	Not Detected	0.41	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
1,1,2-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected



Client Sample ID: Lab Blank

Lab ID#: 0910192-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101106a		Date of Collection: NA	
Dil. Factor:	1.00		Date of Analysis: 10/11/09 02:20 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	0.50	Not Detected	2.0	Not Detected
Dibromochloromethane	0.10	Not Detected	0.85	Not Detected
1,2-Dibromoethane (EDB)	0.10	Not Detected	0.77	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
Bromoform	0.10	Not Detected	1.0	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
1,1,2,2-Tetrachloroethane	0.10	Not Detected	0.69	Not Detected
Propylbenzene	0.10	Not Detected	0.49	Not Detected
4-Ethyltoluene	0.10	Not Detected	0.49	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,3-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,4-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
alpha-Chlorotoluene	0.10	Not Detected	0.52	Not Detected
1,2-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected	3.7	Not Detected
Hexachlorobutadiene	0.50	Not Detected	5.3	Not Detected
Naphthalene	0.50	Not Detected	2.6	Not Detected
Butylbenzene	0.50	Not Detected	2.7	Not Detected
sec-Butylbenzene	0.50	Not Detected	2.7	Not Detected
Isopentane	0.50	Not Detected	1.5	Not Detected
Butane	0.50	Not Detected	1.2	Not Detected
Methylcyclohexane	0.50	Not Detected	2.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130



Client Sample ID: CCV

Lab ID#: 0910192-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101102	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/11/09 11:27 AM

Compound	%Recovery
Freon 12	90
Freon 114	92
Chloromethane	99
Vinyl Chloride	91
1,3-Butadiene	95
Bromomethane	90
Chloroethane	91
Freon 11	89
Ethanol	90
Freon 113	87
1,1-Dichloroethene	82
Acetone	113
2-Propanol	85
Carbon Disulfide	97
Methylene Chloride	91
Methyl tert-butyl ether	102
trans-1,2-Dichloroethene	94
Hexane	94
1,1-Dichloroethane	95
2-Butanone (Methyl Ethyl Ketone)	112
cis-1,2-Dichloroethene	97
Tetrahydrofuran	95
Chloroform	90
1,1,1-Trichloroethane	93
Cyclohexane	98
Carbon Tetrachloride	105
Benzene	106
1,2-Dichloroethane	102
Heptane	116
Trichloroethene	110
1,2-Dichloropropane	106
1,4-Dioxane	109
Bromodichloromethane	111
cis-1,3-Dichloropropene	107
4-Methyl-2-pentanone	116
Toluene	108
trans-1,3-Dichloropropene	98
1,1,2-Trichloroethane	102
Tetrachloroethene	107



Client Sample ID: CCV

Lab ID#: 0910192-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101102	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/11/09 11:27 AM

Compound	%Recovery
2-Hexanone	102
Dibromochloromethane	111
1,2-Dibromoethane (EDB)	105
Chlorobenzene	103
Ethyl Benzene	108
m,p-Xylene	109
o-Xylene	106
Styrene	104
Bromoform	122
Cumene	106
1,1,2,2-Tetrachloroethane	95
Propylbenzene	106
4-Ethyltoluene	108
1,3,5-Trimethylbenzene	106
1,2,4-Trimethylbenzene	108
1,3-Dichlorobenzene	97
1,4-Dichlorobenzene	104
alpha-Chlorotoluene	103
1,2-Dichlorobenzene	98
1,2,4-Trichlorobenzene	88
Hexachlorobutadiene	95
Naphthalene	92
Butylbenzene	110
sec-Butylbenzene	107
Isopentane	85
Butane	90
Methylcyclohexane	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	103	70-130



Client Sample ID: LCS

Lab ID#: 0910192-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101103	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/11/09 12:00 PM

Compound	%Recovery
Freon 12	103
Freon 114	107
Chloromethane	104
Vinyl Chloride	111
1,3-Butadiene	112
Bromomethane	108
Chloroethane	108
Freon 11	103
Ethanol	68
Freon 113	114
1,1-Dichloroethene	115
Acetone	99
2-Propanol	111
Carbon Disulfide	117
Methylene Chloride	115
Methyl tert-butyl ether	127
trans-1,2-Dichloroethene	111
Hexane	116
1,1-Dichloroethane	115
2-Butanone (Methyl Ethyl Ketone)	100
cis-1,2-Dichloroethene	114
Tetrahydrofuran	113
Chloroform	108
1,1,1-Trichloroethane	109
Cyclohexane	117
Carbon Tetrachloride	114
Benzene	121
1,2-Dichloroethane	114
Heptane	131
Trichloroethene	124
1,2-Dichloropropane	122
1,4-Dioxane	128
Bromodichloromethane	125
cis-1,3-Dichloropropene	122
4-Methyl-2-pentanone	136
Toluene	128
trans-1,3-Dichloropropene	115
1,1,2-Trichloroethane	116
Tetrachloroethene	125



Client Sample ID: LCS

Lab ID#: 0910192-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z101103	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/11/09 12:00 PM

Compound	%Recovery
2-Hexanone	127
Dibromochloromethane	129
1,2-Dibromoethane (EDB)	119
Chlorobenzene	116
Ethyl Benzene	122
m,p-Xylene	124
o-Xylene	122
Styrene	130
Bromoform	137
Cumene	125
1,1,2,2-Tetrachloroethane	105
Propylbenzene	123
4-Ethyltoluene	122
1,3,5-Trimethylbenzene	119
1,2,4-Trimethylbenzene	121
1,3-Dichlorobenzene	106
1,4-Dichlorobenzene	112
alpha-Chlorotoluene	122
1,2-Dichlorobenzene	105
1,2,4-Trichlorobenzene	76
Hexachlorobutadiene	82
Naphthalene	85
Butylbenzene	Not Spiked
sec-Butylbenzene	Not Spiked
Isopentane	104
Butane	112
Methylcyclohexane	113

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	101	70-130